WHAT IS CLAIMED:

1. An isolated nucleic acid molecule comprising a nucleotide sequence that encodes a TRAIL comprising:

a) a polypeptide as shown in SEQ ID NO: 21; or

b) a polypeptide as shown in SEQ ID NO: 23.

2. An isolated nucleic acid molecule comprising:

a) a nucleic acid as shown in SEQ ID NO: 20; or

b) a nucleic acid as shown in SEQ ID NO: 22.

3. An isolated nucleic acid molecule comprising a complement of the nucleic acid molecule of any one of Claims 1-2.

4. An isolated nucleic acid molecule which hybridizes to the complement of the nucleic acid molecule of any one of Claims 1-2 under highly stringent conditions.

5. An isolated nucleic acid molecule which hybridizes to the complement of the nucleic acid molecule of any one of Claims 1-2 under moderately stringent conditions.

6. The isolated nucleic acid molecule of Claim 4, wherein said isolated nucleic acid molecule encodes a TRAIL, with the proviso that said TRAIL is not human or mouse TRAIL.

7. The isolated nucleic acid molecule of Claim 5, wherein said isolated nucleic acid molecule encodes a TRAIL, with the proviso that said TRAIL is not human or mouse TRAIL.

8. A vector comprising the nucleic acid of any one of Claims 1-2.

9. An expression vector comprising the nucleic acid of any one of Claims 1-2 operatively associated with a regulatory region controlling the expression of the polypeptide encoded by said nucleic acid.

10. A host cell genetically engineered to contain the nucleic acid of any one of Claims 1-2.

11. A host cell genetically engineered to express the nucleic acid of any one of Claims 1-2 operatively associated with a regulatory region controlling expression of the polypeptide encoded by said nucleic acid.

12. A transgenic, non-human animal which has been genetically engineered to contain a transgene comprising the nucleic acid of any one of Claims 1-2.

13. The transgenic, non-human animal of Claim 12, wherein the transgene is expressed.

14. An isolated polypeptide comprising an amino acid sequence of:

a) SEQ ID NO: 21; or

b) SEQ ID NO: 23.

15. An antibody which binds to the isolated polypeptide of Claim 14.

16. An isolated polypeptide comprising an amino acid sequence encoded by the isolated nucleic acid molecule of Claim 4.

17. An isolated polypeptide comprising an amino acid sequence encoded by the isolated nucleic acid molecule of Claim 5.

18. An isolated fusion polypeptide comprising a fusion peptide and an amino acid sequence of:

a) SEQ ID NO: 21; or

b) SEQ ID NO: 23.

19. An isolated fusion polypeptide comprising a fusion peptide and an amino acid sequence encoded by the isolated nucleic acid molecule of Claim 4.

20. An isolated fusion polypeptide comprising a fusion peptide and an amino acid sequence encoded by the isolated nucleic acid molecule of Claim 5.

21. A method for treating an apoptosis-related disorder in a subject comprising administering to the subject a compound which modulates the function, activity and/or expression of a TRAIL-encoding sequence in said subject.

22. The method of Claim 21, wherein the compound enhances or increases the function, activity and/or expression of the TRAIL-encoding sequence.

23. The methods of any one of Claims 21-22, wherein the compound is selected from the group consisting of a small organic molecule, an antibody, a ribozyme or an antisense molecule.

24. The method of any one of Claims 21-22, wherein the apotosis-related disorder is selected from the group consisting of cancer, neurodegenerative disease, lupus erythematosus, rheumatoid arthritis and multiple sclerosis.

25. The method of Claim 21, wherein said TRAIL-encoding sequence encodes an amino acid sequence comprising:

a) SEQ ID NO: 21; or

b) SEQ ID NO: 23.

26. The method of Claim 21, wherein said subject is a dog or a cat.

27. A method for identifying a compound which modulates expression of a TRAIL-encoding sequence comprising:

a) contacting a test compound to a cell that expresses a TRAIL sequence;

b) measuring a level of TRAIL-encoding sequence expression in the cell;

c) comparing the level of TRAIL-encoding sequence expression in the cell in the presence of the test compound to a level of TRAIL-encoding sequence expression in the cell in the absence of the test compound,

wherein if the level of TRAIL sequence expression in the cell in the presence of the test compound differs from the level of expression of the TRAIL sequence in the cell in the absence of the test compound, a compound that modulates expression of a TRAIL sequence is identified.

28. The method of Claim 27, wherein the TRAIL sequence is endogenously expressed within the cell.

29. The method of Claim 27, wherein the TRAIL-encoding sequence encodes an amino acid sequence comprising:

a) SEQ ID NO: 21; or

b) SEQ ID NO: 23.

30. The method of Claim 27, wherein said TRAIL-encoding sequence comprises:

a) a nucleic acid as set forth in SEQ ID NO: 20; or

b) a nucleic acid as set forth in SEQ ID NO: 22.

31. A method for identifying a compound which modulates activity of an TRAIL sequence product comprising:

a) contacting a test compound to a cell that expresses a TRAIL sequence product;

b) measuring a level of TRAIL sequence product in the cell;

c) comparing the level of TRAIL sequence product activity in the cell in the presence of the test compound to a level of TRAIL sequence product activity in the cell in the absence of the test compound, wherein if the level of TRAIL sequence product activity in the cell in the presence of the test compound differs from the level of TRAIL sequence product activity in the cell in the absence of the test compound, a compound that modulates activity of a TRAIL sequence product is identified.

32. The method of Claim 31, wherein the TRAIL sequence product comprises:

a) a peptide as set forth in SEQ ID NO: 21; or

b) a peptide as set forth in SEQ ID NO: 23.

33. A method for modulating the activity and/or expression of a TRAIL-encoding sequence in a cell comprising administering to the cell a compound which modulates the activity and/or expression of a TRAIL-encoding sequence in the cell.

34. The method of Claim 33, wherein the compound is selected from the group consisting of a small organic molecule, an antibody, a ribozyme.or an antisense molecule.

35. The method of Claim 33, wherein said TRAIL-encoding sequence encodes an amino acid sequence comprising:

a) SEQ ID NO: 21; or

b) SEQ ID NO: 23.

36. The method of Claim 33, wherein said TRAIL-encoding sequence comprises:

a) a nucleic acid as shown in SEQ ID NO: 20; or

b) a nucleic acid as shown in SEQ ID NO: 22.